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### **REMARKS**

#### **Remarks in Support of Patentability of Newly Presented Claims**

##### **Dependent Claim 54**

Dependent claim 54 is believed to be presented in condition for allowance. Neither the Karlstrom reference nor the Floden reference disclose, teach or suggest linking a fiber processing plant distributed control system (DCS) to the processor that communicates with a sensor disposed in one of the plates that is used in the sentencing of a parameter inside the refining zone. Moreover, neither reference discloses, teaches or suggests a DCS that is configured to provide the processor in real time during refiner operation a distribution of motor load in the refining zone or specific power. For at least these reasons, dependent claim 54 is believed to be presented in condition for allowance, and its allowance is respectfully requested.

##### **Dependent Claim 55**

Dependent claim 55 is believed to be presented in condition for allowance. Neither the Karlstrom reference nor the Floden reference disclose, teach or suggest a separate controller that is linked to the processor with the controller being configured to affect some aspect of refiner operation using determined consistency. For at least this reason, dependent claim 55 is believed to be presented in condition for allowance, and its allowance is respectfully requested.

##### **Dependent Claim 56**

Dependent claim 56 is believed to be presented in condition for allowance. Neither the Karlstrom reference nor the Floden reference disclose, teach or suggest regulating refiner operation based on determined consistency to try to keep the determined consistency at or within a predetermined range of a consistency setpoint or of a consistency threshold. For at least these reasons, dependent claim 56 is believed to be presented in condition for allowance, and its allowance is respectfully requested.

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**Dependent Claim 57**

Dependent claim 57 is believed to be presented in condition for allowance. Neither the Karlstrom reference nor the Floden reference disclose, teach or suggest a separate controller that is linked to the processor with the controller being configured to affect some aspect of refiner operation using determined consistency. For at least this reason, dependent claim 57 is believed to be presented in condition for allowance, and its allowance is respectfully requested.

**Dependent Claim 58**

Dependent claim 58 is believed to be presented in condition for allowance. Neither the Karlstrom reference nor the Floden reference disclose, teach or suggest regulating refiner operation based on determined consistency to try to keep the determined consistency at or within a predetermined range of a consistency setpoint or of a consistency threshold. For at least these reasons, dependent claim 58 is believed to be presented in condition for allowance, and its allowance is respectfully requested.

**Dependent Claim 59**

Dependent claim 59 is believed to be presented in condition for allowance. Neither the Karlstrom reference nor the Floden reference disclose, teach or suggest a separate controller that is linked to the processor with the controller being configured to affect some aspect of refiner operation using determined consistency. For at least this reason, dependent claim 59 is believed to be presented in condition for allowance, and its allowance is respectfully requested.

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**Dependent Claim 60**

Dependent claim 60 is believed to be presented in condition for allowance. Neither the Karlstrom reference nor the Floden reference disclose, teach or suggest regulating refiner operation based on determined consistency to try to keep the determined consistency at or within a predetermined range of a consistency setpoint or of a consistency threshold. For at least these reasons, dependent claim 60 is believed to be presented in condition for allowance, and its allowance is respectfully requested.

**Dependent Claim 61**

Dependent claim 61 is believed to be presented in condition for allowance. Neither the Karlstrom reference nor the Floden reference disclose, teach or suggest a separate controller that is linked to the processor with the controller being configured to affect some aspect of refiner operation using determined consistency. For at least this reason, dependent claim 61 is believed to be presented in condition for allowance, and its allowance is respectfully requested.

**Dependent Claim 62**

Dependent claim 62 is believed to be presented in condition for allowance. Neither the Karlstrom reference nor the Floden reference disclose, teach or suggest regulating refiner operation based on determined consistency to try to keep the determined consistency at or within a predetermined range of a consistency setpoint or of a consistency threshold. For at least these reasons, dependent claim 62 is believed to be presented in condition for allowance, and its allowance is respectfully requested.

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#### **Dependent Claim 63**

Dependent claim 63 is believed to be presented in condition for allowance. Neither the Karlstrom reference nor the Floden reference disclose, teach or suggest a single signal conditioner that receives sensor signals from each sensor array of each refiner *of a plurality of refineries* where each sensor array includes at least three radially spaced apart temperature sensors. For at least this reason, dependent claim 63 is believed to be presented in condition for allowance, and its allowance is respectfully requested.

#### **Dependent Claim 64**

Dependent claim 64 is believed to be presented in condition for allowance. Neither the Karlstrom reference nor the Floden reference disclose, teach or suggest that the processor can be part of or can include a computer that is linked to a DCS by wiring with the DCS providing data related to refiner power or refiner load to the computer and the computer being configured to use this data in determining stock consistency. For at least these reasons, dependent claim 64 is believed to be presented in condition for allowance, and its allowance is respectfully requested.

#### **Independent Claim 65**

Independent claim 65 is believed to be presented in condition for allowance. Neither the Karlstrom reference nor the Floden reference disclose, teach or suggest a system for determining stock consistency that includes a processor that obtains or determines data that includes (a) a temperature or pressure of stock in the refining zone, (b) refiner motor power, (c) refiner disk force, and (d) refiner disk gap, and uses this data in determining stock consistency *for each of a plurality of refineries*. For at least these reasons, independent claim 65 is believed to be presented in condition for allowance, and its allowance is respectfully requested.

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**Dependent Claim 66**

Dependent claim 66, which depends from independent claim 65, is believed to be presented in condition for allowance for at least the same reasons why claim 65 should be considered allowable. In addition, neither the Karlstrom reference nor the Floden reference disclose, teach or suggest a DCS linked to the processor and which is configured to provide the processor with at least some of the data recited in claim 65 that is used in determining stock consistency. For at least these reasons, dependent claim 66 is believed to be presented in condition for allowance, and its allowance is respectfully requested.

**Dependent Claim 67**

Dependent claim 67, which also depends from independent claim 65, is believed to be presented in condition for allowance for at least the same reasons why claim 65 should be considered allowable. In addition, neither the Karlstrom reference nor the Floden reference disclose, teach or suggest a DCS configured with software used in determining stock consistency. For at least these reasons, dependent claim 67 is believed to be presented in condition for allowance, and its allowance is respectfully requested.

**Dependent Claim 68**

Dependent claim 68, which also depends from independent claim 65, is believed to be presented in condition for allowance for at least the same reasons why claim 65 should be considered allowable. In addition, neither the Karlstrom reference nor the Floden reference disclose, teach or suggest a processor configured with the recited equations used to determine stock consistency as a function of radial position in the refining zone. For at least these reasons, dependent claim 68 is believed to be presented in condition for allowance, and its allowance is respectfully requested.

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#### **Independent Claim 69**

Independent claim 69 is believed to be presented in condition for allowance. Neither the Karlstrom reference nor the Floden reference disclose, teach or suggest a system for determining stock consistency for a plurality of rotary disk refiners much less a system that includes a processor and DCS with one of the processor and the DCS configured to obtain or determine for each refiner two or more of the following variables: (a) a temperature or pressure of stock in the refining zone, (b) refiner motor power, (c) refiner disk force, and (d) refiner disk gap, with the other one of the processor in the DCS configured to obtain or determine for each refiner the remainder of the aforementioned variables, with one of the processor and the DCS being configured to use all of the aforementioned variables in determining stock consistency for each corresponding refiner. For at least these reasons, independent claim 69 is believed to be presented in condition for allowance, and its allowance is respectfully requested.

#### **Independent Claim 70**

Independent claim 70 is believed to be presented in condition for allowance. Neither the Karlstrom reference nor the Floden reference disclose, teach or suggest a system for determining stock consistency for a plurality of rotary disk refiners. Moreover, neither of these references disclose, teach or suggest a controller that is configured to use determined stock consistency of each refiner to affect some aspect of operation of that corresponding refiner. For at least these reasons, independent claim 70 is believed to be presented in condition for allowance, and its allowance is respectfully requested.

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#### **Dependent Claim 71**

Dependent claim 71, which depends from independent claim 70, is believed to be presented in condition for allowance for at least the same reasons why claim 70 should be considered allowable. In addition, neither the Karlstrom reference nor the Floden reference disclose, teach or suggest a processor configured with the controller that uses determined stock consistency to affect some aspect of corresponding refiner operation. For at least this reason, dependent claim 71 is believed to be presented in condition for allowance, and its allowance is respectfully requested.

#### **Dependent Claim 72**

Dependent claim 72, which also depends from independent claim 70, is believed to be presented in condition for allowance for at least the same reasons why claim 70 should be considered allowable. In addition, neither the Karlstrom reference nor the Floden reference disclose, teach or suggest a DCS configured to provide a processor with data used in determining the determined stock consistency. For at least this reason, dependent claim 72 is believed to be presented in condition for allowance, and its allowance is respectfully requested.

#### **Independent Claim 73**

Independent claim 73 is believed to be presented in condition for allowance. Neither the Karlstrom reference nor the Floden reference disclose, teach or suggest a system for determining stock consistency for a plurality of rotary disk refiners. Moreover, neither of these references disclose, teach or suggest a processor that is configured to obtain a temperature or pressure of stock in refining zone of each refiner and determine a consistency of stock using the obtained temperature or pressure, and a controller that is configured to regulate some aspect of operation of each refiner using the determined stock consistency of that corresponding refiner in trying to keep the determined consistency at a consistency setpoint or within a consistency range. For at least these reasons, independent claim 73 is believed to be presented in condition for allowance, and its allowance is respectfully requested.

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#### **Independent Claim 74**

Independent claim 74 is believed to be presented in condition for allowance. Neither the Karlstrom reference nor the Floden reference disclose, teach or suggest a system for determining stock consistency for a plurality of rotary disk refiners. Moreover, neither of these references disclose, teach or suggest a processor that obtains, for each rotary disk refiner, the several recited variables and uses them in determining stock consistency for that particular refiner. For at least these reasons, independent claim 74 is believed to be presented in condition for allowance, and its allowance is respectfully requested.

#### **Dependent Claim 75**

Dependent claim 75, which depends from independent claim 74, is believed to be presented in condition for allowance for at least the same reasons why claim 74 should be considered allowable. In addition, neither the Karlstrom reference nor the Floden reference disclose, teach or suggest a DCS configured to provide a processor with data used in determining the determined stock consistency. For at least this reason, dependent claim 75 is believed to be presented in condition for allowance, and its allowance is respectfully requested.



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**Conclusion and Request for a One-Month Extension of Time**

All of the claims as amended are believed to define patentable subject matter and to be in proper form for allowance. Therefore, consideration and allowance of the presently pending claims are respectfully requested.

The Commissioner is also authorized to charge payment of \$110, for a one month extension of time from December 10, 2003 until January 12, 2004 (January 10, 2003 fell on a Saturday) for a large entity, to Deposit Account No. 50-1170.

The Commissioner is also authorized to charge payment of any other fees associated with this communication or credit any overpayment to Deposit Account No. 50-1170.

Respectfully submitted,

  
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